

Topic: Creating a Star on Earth: the National Ignition Facility

Speaker: Dr. Ed Moses, Director of the National Ignition Facility

Date: Wednesday, July 15, 2009

Time: 7:00 - 8:30 p.m.

Place: Livermore Public Library, Civic Center, Craft Room

The National Ignition Facility (NIF), the world's largest, highest-energy laser, is right here in the Tri-Valley at Lawrence Livermore National Laboratory. In May, after more than a decade of construction, the stadium-sized NIF was dedicated and is preparing for the first ignition experiments in 2010. If successful, NIF will generate temperatures and pressures found in nature only in the center of stars and giant planets. NIF's 192 giant lasers will be focused on research to enhance national security, advance basic science, and explore the possibility of developing nuclear fusion as a sustainable, carbonfree, minimal-waste source of energy with the potential to revolutionize the world's energy future. Dr. Ed Moses, NIF's director, will offer a glimpse into the future of one of the nation's foremost science projects.



About the speaker: Ed Moses is principal associate director for NIF and Photon

Science at Lawrence Livermore National Laboratory. He first joined Lawrence Livermore in 1980, eventually becoming the deputy associate director for lasers and then assistant associate director for program development in the Physics and Advanced Technologies Directorate, where he led a team that developed a new method of radiation therapy for cancer that was approved by the FDA and licensed for commercial use. Ed was named NIF project manager in 1999 and associate director for the NIF Programs Directorate in July 2005. He received a BS in 1972 and PhD in 1977, both in electrical engineering, from Cornell University. He holds seven patents in laser technology and computational physics.









## Science Chats are open to the public.

We encourage you to bring your family, friends and an open mind — come ready to learn and ask questions. Questions? Please contact Carrie Martin , LLNL Public Affairs Office, at 925-424-4175, martin59@llnl.gov.